Introduction to Technical Communication

Teliris Telepresence.

The heart of technical communication is communicating with people.

Although high-tech tools such as this videoconferencing package from Teliris (2011) are becoming more important in the workplace, the heart of technical communication remains what it has always been: communicating with people. All technical-communication documents—whether e-mails, reports, Web sites, or any of a dozen other forms—are meant to help people learn, carry out tasks, and make decisions. This book is about the process of finding and creating technical information and communicating it to others.

Employers in every industry stress the importance of communication skills. A study of over 400 U.S. companies, which together employ 2 million people, found that almost all of them felt that the following skills are "very important" for new college graduates (Conference Board, 2006, p. 20):

Skill	Percentage of employers who think the skill is "very important"
Oral communication	95.4
Teamwork and collaboration	94.4
Professionalism and work ethic	93.8
Written communication	93.1

A study of more than 100 large American corporations, which together employ 8 million people, suggests that writing is a more important skill for today's professionals than it ever has been (College Entrance Examination Board, 2004, pp. 3–4). Among the major findings of the survey are the following:

- For hiring and promotions, writing is a "threshold skill." If your job-application materials are written poorly, 86 percent of companies surveyed would "frequently" or "almost always" hold it against you. If you somehow get the job, you won't last long enough to be promoted.
- Two-thirds of professionals need strong writing skills in their daily work. Some 80 percent of companies in the service, finance, insurance, and real-estate industries assess applicants' writing during the hiring process. Fifty percent of all companies in all industries consider writing skills in making promotion decisions.

- Half of all companies "frequently" or "almost always" produce reports, memos, and correspondence. Almost 100 percent of companies use e-mail, and more than 80 percent use PowerPoint presentations.

The working world depends on written communication. Within most modern organizations, almost every action is documented in writing, whether on paper or online. Here are a few examples:

- a memo or an e-mail to request information or to identify a problem
- a wiki with instructions that explain how to carry out a new task
- a proposal to persuade management to authorize a project
- a report to document a completed project
- an oral presentation to explain a new policy to employees

Every organization also communicates with other organizations, customers, suppliers, and the public, using materials such as these:

- inquiry letters, sales letters, goodwill letters, and claim and adjustment letters to customers, clients, and suppliers
- Web sites to describe and sell products and to solicit job applications
- podcasts, videos, and posts on social-networking sites to introduce new products and services
- research reports for external organizations
- articles for trade and professional journals

WHAT IS TECHNICAL COMMUNICATION?

You can look at technical communication in two ways: as the process of making and sharing information and ideas in the workplace, and as a set of applications—the documents you write.

Technical communication is the process of finding and using information and sharing meaning. The brief conversations you have with your colleagues in the hallway, the text messages you exchange with vendors, the phone calls with your project team—all these are examples of technical communication.

In fact, every professional spends most of every workday using the four communication skills: reading, writing, speaking, and listening. Think of it this way: a professional is a person who communicates with others about a technical subject. An engineer is a person who communicates about engineering. An architect is a person who communicates about architecture. A biologist is a person who communicates about biology.

Professionals often use these four communication skills to create, design, and transmit technical information so that people can understand it easily

and use it safely, effectively, and efficiently. Much of what you read every day—textbooks, computer-based training videos, procedures manuals, Web sites, owner's manuals—is technical communication.

The purpose of this book is to help you improve your skills in the *process* of technical communication (finding information and developing ideas on your own and with others) and in the *applications* of technical communication (the letters, reports, blogs, and other kinds of documents you will write). The focus of this book is on the techniques that skilled communicators use to analyze their audience and purpose, create and find the best information on their subject, arrange it skillfully to meet their audience's needs and preferences, and deliver it effectively using the most appropriate application.

The principles you have studied in your earlier writing courses apply to technical communication. The biggest difference between technical communication and the other kinds of writing you have done is that technical communication has a somewhat different focus on *audience* and *purpose*.

In most of your previous academic writing, your *audience* has been your instructor, and your *purpose* has been to show your instructor that you have mastered some body of information or skill. Typically, you were not trying to create new knowledge or motivate the reader to take a particular action—except to give you an A for that assignment.

By contrast, in technical communication in the workplace, your *audience* will likely include peers and supervisors in your company, and perhaps people outside your company. Your *purpose* will likely be to reinforce or change their attitudes toward the subject you are writing about, motivate them to take particular actions, or help them carry out their own work-related tasks.

For example, suppose you are a public-health scientist working for a federal agency. You have just completed a study showing that, for most adults, moderate exercise provides as much health benefit as strenuous exercise. You might report your results in a journal article for other scientists, in a press release distributed to popular print and online publications, and in a blog and podcast on your agency's Web site. In each case, you will present the key information in different ways to meet the needs of the various audiences.

WHAT ARE YOUR ROLES AS A COMMUNICATOR?

Regardless of whether you are a *technical professional* (such as an electrical engineer, a chemist, or an accountant) or a *technical communicator* (a person whose main job is to create applications such as manuals, reports, and Web sites), you are likely to have three major roles as a communicator:

- *The writer of a document*. You will be the main author of documents and oral presentations.
- *A member of a project team*. As a member of a team, you will likely participate in writing one or more documents for various audiences.

▶ **On TechComm Web**

For a good introduction to technical communication, see the STC introduction to the subject. Also see Tom Johnson's blog. Click on Links Library for Ch. 1 on <bedfordstmartins .com/techcomm>.

- *An information resource for people inside and outside your organization.* Modern organizations run on information, and it's everyone's responsibility to help provide it. You will communicate with your co-workers when they seek advice and information. In addition, you will communicate with vendors, suppliers, and customers to help them understand your industry and your organization's products and services.

This book focuses on the strategies, techniques, and tools that you will use in all three of these roles.

TECHNICAL COMMUNICATION AND YOUR CAREER

The College Entrance Examination Board study referred to earlier suggests that communication skills are a "threshold skill" required to get and keep a job (2004, pp. 3–4). A survey by the Plain English Network found that 96 percent of the nation's 1,000 largest employers say employees must have good communication skills to get ahead (2002).

Job ads reflect this reality. The following ad from an organization that manufactures medical instruments is typical:

> **Design Assurance Engineer.** Duties include performing electronic/mechanical product, component, and material qualifications. Requires spreadsheet/word-processing abilities, excellent client-relationship skills, and excellent written/oral communication skills. BSEE or biology degree preferred.

According to one survey, almost half of the largest U.S. companies offer or require training for professionals who cannot write well (College Entrance Examination Board, 2004, p. 4). The companies spent about $900 per employee for writing training. Would a company rather save that $900? Of course. The facts of corporate life today are simple: if you cannot communicate well, you are less valuable; if you can, you are more valuable.

CHARACTERISTICS OF A TECHNICAL DOCUMENT

Almost every technical document has six major characteristics: it addresses particular readers, helps readers solve problems, reflects the organization's goals and culture, is produced collaboratively, uses design to increase readability, and consists of words or images or both.

Addresses Particular Readers

Technical documents address particular readers. For instance, if you are planning to write a proposal for your supervisor, you might think about that person's job responsibilities, the level of detail he or she would be interested in reading, and personal factors such as history with the organization and attitudes toward your ideas. These factors help you decide what kind of docu-

ment to write, how to structure it, how much detail to include, and what sentence style and vocabulary to use.

Even if you do not know your readers personally, you can try to create a profile of them. For example, if readers of your brochure are police officers responsible for purchases, you know that they share a police background and a common responsibility for approving expenditures.

Your writing might also be read by people you never intended as your audience: managers and executives in your organization, the public, or the press. Avoid writing anything that will embarrass you or your organization if other audiences read it.

Often, you will write for people from different cultures or whose native language is different from yours. These readers will react differently to the design, organization, and writing style of documents than people from your own culture will. Therefore, you should consider these cultural differences as you write.

A good first step is to read a full-length discussion of intercultural communication, such as one or more of the following respected resources:

Hofstede, G. H., Hofstede, G. J., & Minkow, M. (2010). *Cultures and organizations: Software for the mind* (3rd ed.). New York, NY: McGraw-Hill.

Jandt, F. E. (2009). *An introduction to intercultural communication: Identities in a global community* (6th ed.). Thousand Oaks, CA: Sage.

Lustig, M. W., & Koester, J. (2009). *Intercultural competence: Interpersonal communication across cultures* (6th ed.). Boston, MA: Pearson (Allyn & Bacon).

Neuliep, J. W. (2008). *Intercultural communication: A contextual approach* (4th ed.). Boston, MA: Houghton Mifflin.

Samovar, L. A., Porter, R. E., and McDaniel, E. R. (Eds.). (2008). *Intercultural communication: A reader* (12th ed.). Belmont, CA: Wadsworth.

Another valuable resource is the Intercultural Communication Institute (www .intercultural.org). The articles, training, and resource lists available through this nonprofit organization offer a helpful introduction to the subject.

Helps Readers Solve Problems

Technical documents help readers learn something or carry out a task. For instance, you might watch your company's video on employee benefits to help you select a benefits package. In other words, you watch it because you need information to analyze a situation and solve a problem.

Reflects the Organization's Goals and Culture

Technical documents further the organization's goals. For example, a state government department that oversees vocational-education programs submits an annual report to the state legislature, as well as a lot of technical information for the public: flyers, brochures, pamphlets, radio and television

ads, and course materials. These documents help the department secure its funding and reach its audience.

Technical documents also reflect the organization's culture. For example, many organizations encourage their employees to blog about their areas of expertise. Blogging can help an organization establish an identity based on producing high-quality products, using green energy and protecting the environment, helping the community, and many other values.

Is Produced Collaboratively

Although you will often work alone in writing short documents, you will probably work as part of a team in producing more-complicated documents. Collaboration is common in technical communication because no one person has all the information, skills, or time to create a large document. Writers, editors, designers, and production specialists work with subject-matter experts—the various technical professionals—to create a better document than any one of them could have made working alone.

Collaboration can range from having a colleague review your two-page memo to working with a team of a dozen technical professionals and technical communicators on a 200-page catalog. Social media such as wikis, blogs, and microblogs (such as Twitter) have made another kind of collaboration more convenient. People routinely post questions to networks of friends and associates—both inside and outside their own organization—to help them answer technical questions.

Uses Design to Increase Readability

Technical communicators use design features—typography, spacing, color, special paper, and so forth—to accomplish three basic goals:

- *To make the document look attractive and professional.* If it is attractive and creates a positive impression, you are more likely to accomplish your goal.
- *To help readers navigate the document.* Because a technical document can be long and complicated and most readers want to read only parts of it, design features such as headings, color, and highlighting help readers see where they are and get to where they want to be.
- *To help readers understand the document.* If all the safety warnings in a manual appear in a color and size different from the rest of the text, readers will be better able to recognize the importance of the information.

Consists of Words or Images or Both

Most technical documents include words and images—both static graphics and moving images. Images help the writer perform five main functions:

- make the document more interesting and appealing to readers
- communicate and reinforce difficult concepts

INTERACTIVE SAMPLE DOCUMENT

Studying How Technical Communication Combines Words, Graphics, and Design

This is a page from a brochure from Xerox describing two products. The questions in the margin ask you to consider how technical communication combines words and graphics.

print

Phaser 6180

Step up the pace

The Phaser 6180 laser printer gets your jobs out quickly. Very quickly.

- A print speed of up to 20 ppm in full color brings your work to colorful life without slowing you down.
- Print black-and-white—even complex or large jobs—at up to a speedy 26 ppm thanks to a powerful 400 MHz processor and 128 MB of memory (expandable to 1.152 MB).
- A first-page-out time as quick as 10 seconds means your job's out faster than your trip to the printer.
- The 60,000-page-per-month duty cycle easily handles a steady flow of office document demands.

print copy scan fax

Phaser 6180MFP

Go full speed

Robust multifunction performance that easily keeps up with the busy pace of your entire office.

- One space-saving device does the work of four standalone machines, combining powerful printing, copying, scanning and faxing.
- Fast color at up to 20 ppm lets your entire workgroup enjoy the benefits of color without slowing down.
- Black-and-white prints at up to a quick 31 ppm regardless of your job's size or complexity, thanks to a 400 MHz processor and 348 MB of memory (expandable to 1.408 MB).
- A scan speed of up to 7 color or 20 black-and-white scans per minute lets you quickly go from paper to digital.
- Walk-up fax and LAN fax (fax from the print PCL driver) delivers up to 400 x 400 dpi resolution, and includes JBIG compression technology for faster transmissions.

Intuitive control panel makes copy, fax and scan functions easy to use, and also displays job status and toner levels.

One-button copying makes walkup use quick and easy. No need navigating a menu just to make a copy.

Phaser 6180MFP control panel

Source: Xerox, 2007 <www.office.xerox.com/latest/61CBR-01U.PDF>.

1. How has the company used words and graphics to communicate different kinds of information?

2. How has the company used design to help readers understand that this page describes two different products?

3. How has the company used color to help readers understand the messages that it wishes to communicate?

▷ On TechComm Web

To submit your responses to your instructor, click on Interactive Sample Documents for Ch. 1 on <bedfordstmartins .com/techcomm>.

- communicate instructions and descriptions of objects and processes
- communicate large amounts of quantifiable data
- communicate with nonnative speakers

Technical professionals and technical communicators alike use high-tech tools to produce documents. Although you are unlikely to need to become an expert user of these tools, some of them, such as word processors and spreadsheets, are fundamentally important. Throughout this book, Tech Tips suggest ways to make the most of these tools.

A LOOK AT THREE SAMPLE DOCUMENTS

Figures 1.1 (below), 1.2 (page 11), and 1.3 (page 12) illustrate a number of the characteristics of technical communication discussed in this chapter.

Characteristics of technical communication:

- ***addresses particular readers:*** *This poster is addressed to Spanish-speaking children and their caregivers in the United States.*
- ***helps readers solve problems:*** *It provides information about the elements of a balanced diet.*
- ***reflects the organization's goals and culture:*** *It is intended to show that the organization (the U.S. Department of Agriculture) works to improve children's nutrition.*
- ***is produced collaboratively:*** *The poster was created by nutrition experts, technical communicators, graphic artists, Web authors, and others.*
- ***uses design to increase readability:*** *The width of each color-coded food group is intended to suggest how much of that food group a child requires. Elsewhere on the poster this concept is communicated in more detail.*
- ***consists of words or images or both:*** *The words, colors, and graphics are used to make the message clear and easy to understand.*
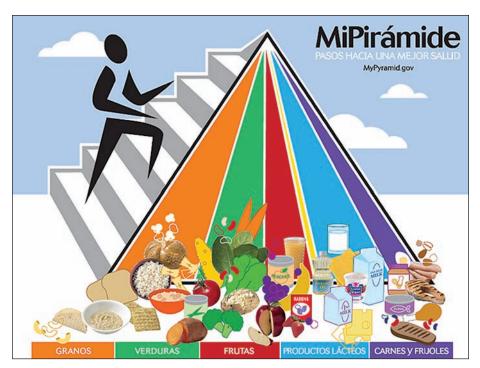

Figure 1.1   A Poster That Shows the Characteristics of Technical Communication
Source: U.S. Department of Agriculture, 2005 <www.mypyramid.gov/downloads/sp-MiniPoster.pdf>.

Proving Usability and Productivity

While creating ACT! 2010 we emphasized a number of usability and productivity related themes. Our first focus area was on navigation. Navigation is the act of finding your way around in a software product. Similar to navigating when traveling by car, there sometimes are easy paths and sometimes difficult paths depending on the route and the signs provided. Our goal was to make navigation as effortless as possible. We did this by creating simplified "context-driven" menus, by including a familiar "PC-style" navigation scheme to access views, and by augmenting the traditional top-of-screen toolbar with big "easy buttons" to allow instant recognition and access to the most frequently used functions. In addition, we added a persistent Lookup box, so you can search for information more quickly (Figure 1).
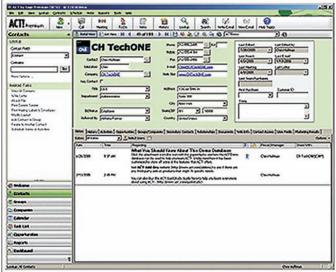
ACT! by Sage

"Our goal was to make navigation as effortless as possible."

Figure 1: Contact Details Screen Showing New User Interface Elements

Second, we added a customizable Welcome page as a home base for users (Figure 2). This new screen is a navigational aid and a touchpoint for beginning ACT! users. It is also a place for all ACT! users to discover important features and how to use them. It exposes advanced features and provides assistance to experienced users who need to access infrequently used functionality. It also provides a view tailored specifically for Administrators.

ACT! by Sage 2010: Delivering on Usability and Productivity   5

Characteristics of technical communication:

- ***addresses particular readers:*** *This page is from a white paper addressed to managers interested in learning about the company's customer relationship management software.*
- ***helps readers solve problems:*** *The page explains how the software is easy to use and shows the user interface.*
- ***reflects the organization's goals and culture:*** *This white paper focuses on usability: making the product easy to use for the customer. The explanations, the image, and the marginal quotation all focus on this goal.*
- ***is produced collaboratively:*** *It was created by the product experts, with the help of technical communicators.*
- ***uses design to increase readability:*** *The three elements—the textual explanation, the screen shot, and the marginal quotation—work together to make an argument.*
- ***consists of words or images or both:*** *The words explain the argument; the graphic shows what the words say.*

👉 **On TechComm Web**

To view Figs. 1.1–1.3 in context on the Web, click on Links Library for Ch. 1 on <bedfordstmartins.com/techcomm>.

Figure 1.2   A White Paper Page That Shows the Characteristics of Technical Communication
Source: Sage Software, 2009 <http://download.act.com/act2010/docs/act_2010_usability_and _productivity_whitepaper.pdf>.

Characteristics of technical communication:

- **addresses particular readers:** *This Web page is addressed to prospective buyers of the company's software.*
- **helps readers solve problems:** *All the elements—the text, the links, and the video—are intended to answer readers' questions and show that the product is a good value. A set of links on the right is called "Solve Your Problem."*
- **reflects the organization's goals and culture:** *This page contains numerous elements—from the photo to the logos from social-media sites such as Facebook—that say that the company will be there to help readers solve their problems.*
- **is produced collaboratively:** *It was created by a writer, with the help of a photographer, a videographer, a designer, and a Web specialist.*
- **uses design to increase readability:** *Although this page contains a lot of information, it is well designed, with navigation information spanning the top and a balanced three-column design in the main content area of the screen.*
- **consists of words or images or both:** *Like much technical communication, this Web page consists of words, images (such as photographs and logos), and video.*

▶ In This Book

For more about the ethical and legal aspects of technical communication, see Ch. 2.

Figure 1.3   A Q&A That Shows the Characteristics of Technical Communication
Source: Marathon Technologies, 2010 <www.marathon1.com/why_marathon_video.html>.

MEASURES OF EXCELLENCE IN TECHNICAL COMMUNICATION

Eight measures of excellence characterize all technical communication: honesty, clarity, accuracy, comprehensiveness, accessibility, conciseness, professional appearance, and correctness.

Honesty

The most important measure of excellence in technical communication is honesty. For three reasons, you have to tell the truth and not mislead the reader:

- *It is the right thing to do*. Technical communication is meant to help people make wise choices as they use the information available in a high-tech culture.
- *If you are dishonest, readers can get hurt*. Misinforming your readers or deliberately omitting important information can defraud, injure, or kill people.

- *If you are dishonest, you and your organization could face serious legal charges.* If a court finds that your document's failure to provide honest, appropriate information caused a substantial injury or loss, your organization might have to pay millions of dollars.

ETHICS NOTE

You will find Ethics Notes throughout this book. These notes will describe typical ethical problems related to technical communication and suggest ways to think about them.

Clarity

Your goal is to produce a document that conveys a single meaning the reader can understand easily. The following directive, written by the British navy (*Technical Communication*, 1990), is an example of what to avoid:

> It is necessary for technical reasons that these warheads should be stored upside down, that is, with the top at the bottom and the bottom at the top. In order that there may be no doubt as to which is the top and which is the bottom, for storage purposes, it will be seen that the bottom of each warhead has been labeled with the word TOP.

Technical communication must be clear for two reasons:

- *Unclear technical communication can be dangerous.* A carelessly drafted building code, for example, could tempt contractors to use inferior materials or techniques.
- *Unclear technical communication is expensive.* The average cost of a telephone call to a customer-support center is more than $32 (About.com, 2008). Clear technical communication in the product's documentation—its instructions—can greatly reduce the number and length of such calls.

Accuracy

You need to get your facts straight. A slight inaccuracy can confuse and annoy your readers; a major inaccuracy can be dangerous and expensive. In another sense, accuracy is a question of ethics. Technical documents must be as objective and unbiased as you can make them. If readers suspect that you are slanting information—by overstating or omitting facts—they will doubt the validity of the entire document.

Comprehensiveness

A good technical document provides all the information readers need. It describes the background so that readers unfamiliar with the subject can understand it. It contains sufficient detail so that readers can follow the

discussion and carry out any required tasks. It refers to supporting materials clearly or includes them as attachments.

Comprehensiveness is crucial because readers need a complete, self-contained discussion in order to use the information safely, effectively, and efficiently. A document also often serves as the official company record of a project, from its inception to its completion.

Accessibility

Most technical documents—both in print and online—are made up of small, independent sections. Because few people will read a document from the beginning to the end, your job is to make its various parts accessible. That is, readers should not be forced to flip through the pages or click links unnecessarily to find the appropriate section.

Conciseness

A document must be concise enough to be useful to a busy reader. You can shorten most writing by 10 to 20 percent simply by eliminating unnecessary phrases, choosing shorter words, and using economical grammatical forms. Your job is to figure out how to convey a lot of information economically.

Professional Appearance

You start to communicate before anyone reads the first word of the document. If the document looks neat and professional, readers will form a positive impression of it and of you. Your document should adhere to the format standards of your organization or your professional field, and it should be well designed and neatly printed. For example, a letter should follow one of the traditional letter formats and have generous margins.

Correctness

A correct document is one that adheres to the conventions of grammar, punctuation, spelling, mechanics, and usage. Sometimes, incorrect writing can confuse readers or even make your writing inaccurate. The more typical problem, however, is that incorrect writing makes you look unprofessional. If your writing is full of errors, readers will wonder if you were also careless in gathering, analyzing, and presenting the technical information. If readers doubt your professionalism, they will be less likely to accept your conclusions or follow your recommendations.

A technical document is meant to convey information to a particular audience so that they understand something or carry out a task. To accomplish these goals, it must be honest, clear, accurate, comprehensive, accessible, concise, professional in appearance, and correct.

Exercises

In This Book For more about memos, see Ch. 14, p. 385.

1. **INTERNET EXERCISE** Form small groups and study the home page of your college or university's Web site. Focus on three characteristics of technical communication:

   - It addresses particular readers.
   - It helps readers solve problems.
   - It reflects the organization's goals and culture.

   Identify two or three examples of each characteristic on the home page of the site. For example, for the characteristic that technical communication addresses particular readers, you might point to the section of the site called "For Prospective Students" because it presents information addressed specifically to people who are considering enrolling. Be prepared to share your findings with the class.

2. Locate an owner's manual for a consumer product, such as a coffeemaker, bicycle, or hair dryer. In a memo to your instructor, describe and evaluate the manual. To what extent does it meet the measures of excellence discussed in this chapter? In what ways does it fall short? Submit a copy of the document (or a representative portion of it) with your memo.

3. **INTERNET EXERCISE** Locate a document on the Web that you think is an example of technical communication. Describe the aspects of the document that illustrate the characteristics of technical communication discussed in this chapter. Then evaluate the effectiveness of the document. Write your response in a memo to your instructor. Submit a copy of the document (or a representative portion of it) with your assignment.

Case 1: Using the Measures of Excellence in Evaluating a Résumé

Background

It is the first day of the semester, and the instructor in your technical-communication class, Robin Shaftsbury, has asked for your assistance. Prof. Shaftsbury is planning to invite five guest speakers to the classroom during the semester to discuss topics such as the role of graphics in business documents, ethics in the workplace, writing effective proposals, and delivering oral presentations.

"What I'd like your help with," Prof. Shaftsbury says to you after class, "is the presentation on résumés and job-application letters. The speaker is Matt Ito, the Director of the Career Center."

"How can I help?" you ask.

"I know that Matt has a standard presentation that he delivers in classes about the process of preparing job-application materials, strategies for looking for work, and so forth. But I spoke with him on the phone last week, asking him if he wouldn't mind tailoring the presentation to our course. He said he'd be happy to. So I'd like you to meet with him and help him see what we're doing in Chapter 1 of our text. Can you figure out some way he can key his remarks to the 'Measures of Excellence' section of the chapter?"

"How long do you want his presentation to be?" you ask.

"He said he could do 20 minutes, focusing on résumés, but if you've got ideas for some kind of class activity after he leaves to fill out the 50 minutes, that's fine."

You tell Prof. Shaftsbury that you'll get right on it. Later that day, you realize that if you had a representative résumé, you could show that to Mr. Ito before his presentation so that he could discuss it in some detail. You e-mail Prof. Shaftsbury, who sends you a job notice (Document 1.1) and a student's résumé that responds to that notice (Document 1.2).

Your Assignment

1. You decide that a useful activity for the class to carry out after Mr. Ito's remarks is to evaluate the résumé according to the measures of excellence discussed in Chapter 1. Using a word processor, create a form that you can distribute to the class members that prompts them to evaluate the résumé. Be sure the form is itself a model of effective technical communication and that it prompts students to evaluate the résumé according to each of the measures of excellence, that it gives class members space to write comments, and that it enables students to use a numerical score to measure the effectiveness of the résumé.

2. Using this form, evaluate the résumé.

Document 1.1   Job Notice for Technical-Support Positions in Boise

Tech Support Positions (Boise)
Date: 2012-03-23, 2:40PM MDT

Hiring for Technical Support and Customer Service positions! VisionPerformance is now hiring for Technical Support Representatives! Full-time positions are available.

Requirements:

- *BA or BS in Computer Science or appropriate experience.*
- *Excellent communication skills.*
- *Attention to detail.*
- *Working knowledge of TCP/IP, LAN/WAN, VPN, TCP IP, and Network environments.*
- *Basic PC and Mac knowledge.*
- *Type 55+ wpm.*
- *Customer service skills, call center experience a plus.*

We offer medical, dental, and vision insurance just 30 days after employment, with competitive wages, referral bonuses, 401(k), and lots more!

Apply online at <www. visionperformance.com/USA/ Careers/Default.aspx> and click on Apply Now!

Location: Boise
Compensation: $17.00 per hour

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                        Corey S. Kendall
```

3929 Macmillan Str. #6   (208)555-1603
Garden City, Id. 837134   **kendall.corey@gmail.com**

OBJECTIVE: Support Technician.
          A position using proven intrapersonal and technical skills.

PROFILE

A quick and willing learner of all things technical. Capable of hardware and software installation, systematic troubleshooting and providing technical research. Open to all new experiences and great at translating learning into real-life experience.

SUMMARY OF QUALIFICATIONS

- Expertise in troubleshooting and technical research.
- Excellant organization and communion skills.
- Great team player, and integrate well into new environments.
- High technical attitude that allows for ease of integration into new technical settings.

TECHNICAL EXPERIENCE / EXPERTISE

Languages   HTML, CSS, JavaScirpt
Software   Powerpoint, Word, Excel, OpenOffice.org, Marcomedia Flash
Operating Systems Windows (9x, 2000, XP), Linux (RedHat, Mandrake, SuSE, Ubuntu)
Hardware   Peripherials, Routers, Switches, Network Cards, Building custom PC's

PROFESSIONAL EXPERIENCE

Cymbal Software, Boise, ID   *Web Designer*   2090-2011
- Design, code and implement web pages using HTML, JavaScript and Css.
- Performed tasks related to advertising

Garden City School Systems,   *Custodian*   Summer 2009
Garden City, ID
- Responsible for grounds maintaince.
- Accomplished in gaining the trust of leaders and authorities over me.

EDUCATION

```
   Courses included APCS, ICT A+, CAD, and Intro to Technology
```

Boise State University, Boise, ID   2009 - Percent
   Major: Computer Science, 4 year program

```
        Courses included C, Java, math, english
```

```
   Excellent references available upon request.
```

Document 1.2   Résumé for Corey S. Kendall

Understanding Ethical and Legal Considerations

Joseph McNally/Getty Images.

Does a bicycle company care about riders' safety?

Ethical and legal issues are all around you in your work life. If you look at the Web site of any bike manufacturer, you will see that bicyclists are always shown wearing helmets. Is this because bike manufacturers care about safety? Certainly. But bike makers also care about product liability. If a company Web site showed cyclists without helmets, an injured cyclist could sue, claiming that the company was suggesting it is safe to ride without a helmet.

Ethical and legal pitfalls lurk in the words and graphics of many kinds of formal documents. In writing a proposal, you might be tempted to exaggerate or lie about your organization's past accomplishments, pad the résumés of the project personnel, list as project personnel some workers who will not be contributing to the project, or present an unrealistically short work schedule. In drafting product information, you might feel pressured to exaggerate the quality of the products shown in catalogs or manuals or to downplay the hazards of using those products. In creating graphics, you might be asked to hide an item's weaknesses by manipulating a product photo electronically.

One thing is certain: there are many serious ethical and legal issues related to technical communication, and all professionals need a basic understanding of them.

A BRIEF INTRODUCTION TO ETHICS

Ethics is the study of the principles of conduct that apply to an individual or a group. For some people, ethics is a matter of intuition—what their gut feelings tell them about the rightness or wrongness of an act. Others see ethics in terms of their own religion or the Golden Rule: treat others as you would like them to treat you. Ethicist Manuel G. Velasquez outlines four moral standards that are useful in thinking about ethical dilemmas (2006):

• *Rights.* This standard concerns individuals' basic needs and welfare. Everyone agrees, for example, that people have a right to a reasonably safe workplace. When we buy a product, we have a right to expect that the information that accompanies it is honest and clear. However, not everything that is desirable is necessarily a right. For example, in some countries high-quality health care is considered a right. That is, the government is required to provide it, regardless of whether a person can afford to pay for it. In other countries, health care is not considered a right.

- *Justice.* This standard concerns how the costs and benefits of an action or a policy are distributed among a group. For example, the cost of maintaining a highway should be borne, in part, by people who use that highway. However, because everyone benefits from the highway, it is just that general funds also be used. Another example: justice requires that people doing the same job receive the same pay, regardless of whether they are male or female, black or white.

- *Utility.* This standard concerns the positive and negative effects that an action or a policy has, will have, or might have on others. For example, if a company is considering closing a plant, the company's leaders should consider not only the money they would save but also the financial hardship of laid-off workers and the economic effects on the community. One tricky part in thinking about utility is figuring out the time frame to examine. An action such as laying off employees can have one effect in the short run—improving the company's quarterly balance sheet—and a very different effect in the long run—hurting the company's productivity or the quality of its products.

- *Care.* This standard concerns the relationships we have with other individuals. We owe care and consideration to all people, but we have greater responsibilities to people in our families, our workplaces, and our communities. The closer a person is to us, the greater care we owe that person. Therefore, we have greater obligations to members of our family than we do to others in our community.

Although these standards provide a vocabulary for thinking about how to resolve ethical conflicts, they are imprecise and often conflict with each other. Therefore, they cannot provide a systematic method of resolving ethical conflicts. Take the case of a job opportunity in your company. You are a member of the committee that will recommend which of six applicants to hire. One of the six is a friend of yours who has recently gone through a divorce and is currently unemployed. He needs the health benefits the job provides because he has a daughter with a chronic condition who requires expensive medications. Unfortunately, you have concluded that he is less qualified for the position than some of the other applicants.

How can the four standards help you think through the situation? According to the *rights* standard, lobbying for your friend or against the other applicants would be wrong because all applicants have a right to an evaluation process that considers only their qualifications to do the job. Looking at the situation from the perspective of *justice* yields the same conclusion: it would be wrong to favor your friend. From the perspective of *utility*, lobbying for your friend would probably not be in the best interests of the organization, although it might be in your friend's best interests. Only according to the *care* standard does lobbying for your friend seem reasonable.

As you think about this case, you have to consider another related question: should you tell the other people on the hiring committee that one of the applicants is your friend? Yes, because they have a right to know about your

personal relationship so that they can better evaluate your contributions to the discussion. You might also offer to recuse yourself (that is, not participate in the discussion of this position), leaving it to the other committee members to decide whether your friendship with a candidate represents a conflict of interest.

One more complication in thinking about this case: Let's say your friend is one of the top two candidates for the job. In your committee, which is made up of seven members, three vote for your friend, but four vote for the other candidate, who has a very good job with excellent benefits. She is a young, dynamic employee with degrees from prestigious universities. In other words, she is likely to be very successful in the working world, regardless of whether she is offered this particular job. Should the fact that your friend's career is in some real trouble affect your thinking about this problem? Some people would say no: the job should be offered to the most qualified applicant. Others would say yes: society does not adequately provide for its less-fortunate members, and because your friend needs the job more and is almost as qualified as the other top applicant, he should get the offer. In other words, some people would see this situation as a narrow, technical question of determining the best candidate for the job, whereas others would see it as a much broader social question involving human rights.

Most people do not explore the conflict among rights, justice, utility, and care when they confront a serious ethical dilemma; instead, they simply do what they think is right. Perhaps this is good news. However, the depth of ethical thinking varies dramatically from one person to another, and the consequences of superficial ethical thinking can be profound. For these reasons, ethicists have described a general set of principles that can help people organize their thinking about the role of ethics within an organizational context. These principles form a web of rights and obligations that connect an employee, an organization, and the world in which the organization is situated.

For example, in exchange for their labor, employees enjoy three basic rights: fair wages, safe and healthy working conditions, and due process in the handling of such matters as promotions, salary increases, and firing. Although there is still serious debate about the details of employee rights, such as the freedom from surreptitious surveillance and unreasonable searches in drug investigations, the question almost always concerns the extent of employees' rights, not the existence of the basic rights themselves. For instance, ethicists disagree about whether hiring undercover investigators to identify drug users at a job site is an unwarranted intrusion on the employees' rights, but there is no debate about the right of exemption from unwarranted intrusion.

YOUR ETHICAL OBLIGATIONS

In addition to enjoying rights, an employee assumes obligations, which can form a clear and reasonable framework for discussing the ethics of technical communication. The following discussion outlines three sets of obligations: to your employer, to the public, and to the environment.

Obligations to Your Employer

You will be hired to further your employer's legitimate aims and to refrain from any activities that run counter to those aims. Specifically, you have five obligations:

- *Competence and diligence*. *Competence* refers to your skills; you should have the training and experience to do the job adequately. *Diligence* simply means hard work.

- *Generosity*. Although *generosity* might sound like an unusual obligation, you are obligated to help your co-workers and stakeholders outside your organization by sharing your knowledge and expertise. What this means is that if you are asked to respond to questions or provide recommendations on some aspect of your organization's work, you should do so. If a customer or supplier contacts you, make the time to respond helpfully. Generosity shows professionalism and furthers your organization's goals.

- *Honesty and candor*. You should not steal from your employer. Stealing includes such practices as embezzlement, "borrowing" office supplies, and padding expense accounts. *Candor* means truthfulness; you should report problems to your employer that might threaten the quality or safety of the organization's product or service.

  Issues of honesty and candor include what Sigma Xi, the Scientific Research Society, calls trimming, cooking, and forging (Sigma Xi, 1986, p. 11). *Trimming* is the smoothing of irregularities to make research data look extremely accurate and precise. *Cooking* is retaining only those results that fit the theory and discarding the others. And *forging* is inventing some or all of the data, and even reporting experiments that were never performed. In carrying out research, employees must resist any pressure to report only positive, statistically significant findings.

- *Confidentiality*. You should not divulge company business outside of the company. If a competitor finds out that your company is planning to introduce a new product, it might introduce its own version of that product, robbing you of your competitive advantage. Many other kinds of privileged information—such as quality-control problems, personnel matters, relocation or expansion plans, and financial restructuring—also could be used against the company. A well-known problem of confidentiality involves *insider information*: an employee who knows about a development that will increase the value of the company's stock, for example, buys the stock before the information is made public, thus reaping an unfair (and illegal) profit.

- *Loyalty*. You should act in the employer's interest, not in your own. Therefore, it is unethical to invest heavily in a competitor's stock because that could jeopardize your objectivity and judgment. For the same reason, it is unethical to accept bribes or kickbacks. It is unethical to devote considerable time to moonlighting (performing an outside

job, such as private consulting) because the outside job could lead to a conflict of interest and because the heavy workload could make you less productive in your primary position. However, you do not owe your employer absolute loyalty; if your employer is acting unethically, you have an obligation to try to change that behavior, even, if necessary, by blowing the whistle.

Obligations to the Public

Every organization that offers products or provides services is obligated to treat its customers fairly. As a representative of an organization, and especially as an employee communicating technical information, you will frequently confront ethical questions.

In general, an organization is acting ethically if its product or service is both *safe* and *effective*. The product or service must not injure or harm the consumer, and it must fulfill its promised function. However, these common-sense principles provide little guidance in dealing with the complicated ethical problems that arise routinely.

According to the U.S. Consumer Product Safety Commission (2009), more than 4,500 deaths and 14 million injuries occur each year in the United States because of consumer products—not counting automobiles and medications. Even more commonplace, of course, are product and service failures: products or services don't do what they are supposed to do, products are difficult to assemble or operate, they break down, or they require more expensive maintenance than indicated in the product information.

Who is responsible for injuries and product failures—the company that provides the product or service or the consumer who purchases it? In individual cases, blame is sometimes easy enough to determine. A person who operates a chainsaw without reading the safety warnings and without seeking any instruction in how to use it is to blame for any injuries caused by the normal operation of the saw. But a manufacturer that knows that the chain on the saw is liable to break under certain circumstances and fails to remedy this problem or warn the consumer is responsible for any resulting accidents.

Unfortunately, such ideas do not outline a rational theory that can help companies understand how to act ethically in fulfilling their obligations to the public. Today, most court rulings are based on the premise that the manufacturer knows more about its products than the consumer does and therefore has a greater responsibility to make sure the products comply with all of the manufacturer's claims and are safe. Therefore, in designing, manufacturing, testing, and communicating about a product, the manufacturer has to make sure the product will be safe and effective when used according to the instructions. However, the manufacturer is not liable when something goes wrong that it could not have foreseen or prevented.

Obligations to the Environment

One of the most important lessons we have learned in recent decades is that we are polluting and depleting our limited natural resources at an unacceptably high rate. Our excessive use of fossil fuels not only deprives future generations of their use but also causes possibly irreversible pollution problems, such as global warming. Everyone—government, businesses, and individuals—must work to preserve the environment to ensure the survival not only of our own species but also of the other species with which we share the planet.

But what does this have to do with you? In your daily work, you probably do not cause pollution or deplete the environment in any extraordinary way. Yet because of the nature of your work, you will often know how your organization's actions affect the environment. For example, if you work for a manufacturing company, you might be aware of the environmental effects of making or using your company's products. Or you might help write an environmental impact statement.

As communicators, we should treat every actual or potential occurrence of environmental damage seriously. We should alert our supervisors to the situation and work with them to try to reduce the damage. The difficulty, of course, is that protecting the environment can be expensive. Clean fuels cost more than dirty ones. Disposing of hazardous waste properly costs more (in the short run) than merely dumping it. Organizations that want to reduce costs may be tempted to cut corners on environmental protection.

YOUR LEGAL OBLIGATIONS

Although most people believe that ethical obligations are more comprehensive and more important than legal obligations, the two sets of obligations are closely related. Our ethical values have shaped many of our laws. For this reason, professionals should know the basics of four different bodies of law: copyright, trademark, contract, and liability.

Copyright Law

As a student, you are constantly reminded to avoid plagiarism. A student caught plagiarizing would likely fail the assignment or the course or even be expelled from school. A medical researcher or a reporter caught plagiarizing would likely be fired, or at least find it difficult to publish in the future. But plagiarism is an ethical, not a legal, issue. Although a plagiarist might be expelled from school or be fired, he or she will not be fined or sent to prison.

By contrast, copyright is a legal issue. *Copyright law* is the body of law that relates to the appropriate use of a person's intellectual property: written documents, pictures, musical compositions, and the like. Copyright literally refers to a person's *right* to *copy* the work that he or she has created.

On TechComm Web

For more about copyright law, see the U.S. Copyright Office Web site. Click on Links Library for Ch. 2 on <bedfordstmartins .com/techcomm>.

The most important concept in copyright law is that only the copyright holder—the person or organization that owns the work—can copy it. For instance, if you work for IBM, you can legally copy information from the IBM Web site and use it in other IBM documents. This reuse of information is routine in business, industry, and government because it helps ensure that the information a company distributes is both consistent and accurate.

However, if you work for IBM, you cannot simply copy information that you find on the Dell Web site and put it in IBM publications. Unless you obtained written permission from Dell to use its intellectual property, you would be infringing on Dell's copyright.

Why doesn't the Dell employee who wrote the information for Dell own the copyright to that information? The answer lies in a legal concept known as *work made for hire*. Anything written or revised by an employee on the job is the company's property, not the employee's.

Although copyright gives the owner of the intellectual property some rights, it doesn't give the owner all rights. You can place small portions of copyrighted text in your own document without getting formal permission from the copyright holder. When you quote a few lines from an article, for example, you are taking advantage of an aspect of copyright law called *fair use*. Under fair-use guidelines, you have the right to use material, without getting permission, for purposes such as criticism, commentary, news reporting, teaching, scholarship, or research. Unfortunately, *fair use* is based on a set of general guidelines that are meant to be interpreted on a case-by-case basis. Keep in mind that you should still cite the source accurately to avoid plagiarism.

> **On TechComm Web**
>
> The U.S. Copyright Office Web site describes work made for hire. Click on Links Library for Ch. 2 on <bedfordstmartins .com/techcomm>.

Guidelines

Determining Fair Use

Courts consider four factors in disputes over fair use:

▶ **The purpose and character of the use, especially whether the use is for profit.** Profit-making organizations are scrutinized more carefully than nonprofits.

▶ **The nature and purpose of the copyrighted work.** When the information is essential to the public—for example, medical information—fair use is applied more liberally.

▶ **The amount and substantiality of the portion of the work used.** A 200-word passage would be a small portion of a book but a large portion of a 500-word brochure.

▶ **The effect of the use on the potential market for the copyrighted work.** Any use of the work that is likely to hurt the author's potential to profit from the original work will probably not be considered fair use.

A new trend in copyright is for copyright owners to stipulate which rights they wish to retain and which they wish to give up. You might see references to Creative Commons, a not-for-profit organization that provides symbols for copyright owners to use to communicate their preferences. Figure 2.1 shows three of the Creative Commons symbols.

Attribution. You stipulate how you want people to give you credit if they copy, distribute, display, or perform your copyrighted work. For example, you might require that another person cite your photograph as "Photo by Jane Curruthers" and include a thumbnail photo of you that you have provided.

Noncommercial. You prohibit others from using your work for commercial purposes. For instance, you might permit a nonprofit organization such as the March of Dimes to quote your poem but forbid a commercial publisher to do so.

No Derivative Works. You permit people to copy, distribute, display, and perform your work just as you created it, without making any changes to it. For example, a company can reproduce a computer-based program you have created, but it may not change the background color or any other aspect of the program. In other words, the company may not create a derivative work.

Figure 2.1   Selected Licensing Symbols from Creative Commons

The organization has created a number of symbols to represent rights that copyright owners can retain or surrender.

Source: Creative Commons, 2010 <http://creativecommons.org/about/licenses>.

Guidelines

Dealing with Copyright Questions

Consider the following advice when using material from another source.

▶ **Abide by the fair-use concept.** Do not rely on excessive amounts of another source's work (unless the information is your company's own boilerplate).

▶ **Seek permission.** Write to the source, stating what portion of the work you wish to use and the publication you wish to use it in. The source is likely to charge you for permission.

▶ **Cite your sources accurately.** Citing sources fulfills your ethical obligation and strengthens your writing by showing the reader the range of your research.

▶ **Consult legal counsel if you have questions.** Copyright law is complex. Don't rely on instinct or common sense.

ETHICS NOTE

Distinguishing Plagiarism from Acceptable Reuse of Information

Plagiarism is the act of using someone else's words or ideas without giving credit to the original author. It doesn't matter whether the writer intended to plagiarize. Obviously, it is plagiarism to borrow, buy, or steal graphics, video or audio media, written passages, or entire documents, and then use them without attribution. Web-based sources are particularly vulnerable to plagiarism, partly because people mistakenly think that if information is on the Web it is free to borrow and partly because it is so easy to copy, paste, and reformat Web-based material.

However, writers within a company often reuse one another's information without giving credit—and it is completely ethical. For instance, companies write press releases when they wish to publicize news. These press releases typically conclude with descriptions of the company and how to get in touch with an employee who can answer questions about the company's products or services. These descriptions, sometimes called *boilerplate*, are simply copied and pasted from previous press releases. Because these descriptions are legally the intellectual property of the company, reusing them in this way is completely honest. Similarly, companies often *repurpose* their writing. That is, they copy a description of the company from a press release and paste it into a proposal or an annual report. This reuse also is acceptable.

When you are writing a document and need a passage that you suspect someone in your organization might already have written, ask a more-experienced co-worker whether the culture of your organization permits reusing someone else's writing. If the answer is yes, check with your supervisor to see whether he or she approves what you plan to do.

Trademark Law

Companies use *trademarks* and *registered trademarks* to ensure that the public recognizes the name or logo of a product.

- A *trademark* is a word, phrase, name, or symbol that is identified with a company. The company uses the ™ symbol after the product name to claim the design or device as a trademark. For instance, Google claims the multicolored design of the word Google™ as a trademark. Claiming a trademark permits a company to go to state court to try to prevent other companies from using the trademarked item for their own products.

- A *registered trademark* is a word, phrase, name, or symbol that the company has registered with the U.S. Patent and Trademark Office. The company can then use the ® symbol after the trademarked item. Registering a trademark, a process that can take years, ensures much more legal protection throughout the United States, as well as in other nations.

All employees are responsible for using the trademark and registered trademark symbols accurately when referring to a company's products.

Guidelines

Protecting Trademarks

Use the following techniques to protect your client's or employer's trademark.

▶ **Distinguish trademarks from other material.** Use boldface, italics, a different typeface or size, or a different color to distinguish the trademarked item.

▶ **Use the trademark symbol.** At least once in each document—preferably the first time the name or logo appears—use the appropriate symbol after the name or logo, followed by an asterisk. At the bottom of the page, include a statement such as the following: "*COKE is a registered trademark of the Coca-Cola Company."

▶ **Use the trademarked item as an adjective, not as a noun or verb.** Trademarks can become confused with the generic term they refer to. Use the trademarked item along with the generic term, as in Xerox® photocopier or LaserJet® printer.

▶ **Do not use the plural form or the possessive form of the term.** Doing so reduces the uniqueness of the item and encourages the public to think of the term as generic.

DOES NOT PROTECT TRADEMARK	buy three LaserJets®
PROTECTS TRADEMARK	buy three LaserJet® printers
DOES NOT PROTECT TRADEMARK	LaserJet's® fine quality
PROTECTS TRADEMARK	the fine quality of LaserJet® printers

Contract Law

Contract law deals with agreements between two parties. In most cases, disputes concern whether a product lives up to the manufacturer's claims. These claims are communicated as express warranties or implied warranties.

An *express warranty* is a written or oral statement that the product has a particular feature or can perform a particular function. For example, a statement in a printer manual that the printer produces 17 pages per minute is an express warranty. An *implied warranty* is a warranty that is not written or spoken explicitly but inferred by the purchaser. Implied warranties also occur in more-casual communications, such as letters to customers or conversations between salespeople and customers. Figure 2.2 illustrates an implied warranty.

Liability Law

Under product-liability law, a manufacturer or seller of a product is liable for injuries or damages caused by the use of that product. Liability is an important concern for communicators because courts frequently rule that manufacturers are responsible for providing adequate operating instructions and for warning consumers about the risks of using their products. Figure 2.3 shows a warning label used to inform people how to avoid a safety risk.

Figure 2.2   An Implied Warranty

This photograph of a child operating a particular rock polisher is an implied warranty that children can operate it safely.
Source: Natural Science Industries, 2005 <http://images.amazon.com/images/P/B00000ISUU.01._SCLZZZZZZZ_.jpg>.

Figure 2.3   A Warning Label

This warning label uses symbols—such as the orange box, the red circle with the slash, and the image of the heart and pacemaker—and words to visually and verbally warn people with pacemakers to stay away from a device that can hurt them. The warning helps the company do the right thing—and avoid product-liability lawsuits.
Source: Safety Label Solutions, 2010 <http://safetylabelsolutions .com/store/page8.html>.

Guidelines

Abiding by Liability Laws

Pamela S. Helyar summarizes the communicator's obligations and offers ten guidelines for abiding by liability laws (1992):

▶ **Understand the product and its likely users.** Learn everything you can about the product and its users.

▶ **Describe the product's functions and limitations.** Help people determine whether it is the right product to buy. In one case, a manufacturer was found liable for not stating that its electric smoke alarm does not work during a power outage.

▶ **Instruct users on all aspects of ownership.** Include assembly, installation, use and storage, testing, maintenance, first aid and emergencies, and disposal.

▶ **Use appropriate words and graphics.** Use common terms, simple sentences, and brief paragraphs. Structure the document logically, and include specific directions. Make graphics clear and easy to understand; where necessary, show people performing tasks. Make the words and graphics appropriate to the education, mechanical ability, manual dexterity, and intelligence of intended users. For products that will be used by children or nonnative speakers of your language, include graphics illustrating important information.

▶ **Warn users about the risks of using or misusing the product.** Warn users about the dangers of using the product, such as chemical poisoning. Describe the cause, extent, and seriousness of the danger. A car manufacturer was found

▶ **In This Book**

For a discussion of *danger*, *warning*, and *caution*, see Ch. 20, p. 587.

liable for not having warned consumers that parking a car on grass, leaves, or other combustible material could cause a fire. For particularly dangerous products, explain the danger and how to avoid it, and then describe how to use the product safely. Use *mandatory language*, such as *must* and *shall*, rather than *might*, *could*, or *should.* Use the words *warning* and *caution* appropriately.

▶ **Include warnings along with assertions of safety.** When product information says that a product is safe, readers tend to pay less attention to warnings. Therefore, include detailed warnings to balance the safety claims.

▶ **Make directions and warnings conspicuous.** Safety information must be in large type and easily visible, appear in an appropriate location, and be durable enough to withstand ordinary use of the product.

▶ **Make sure that the instructions comply with applicable company standards and local, state, or federal statutes.**

▶ **Perform usability testing on the product (to make sure it is safe and easy to use) and on the instructions (to make sure they are accurate and easy to understand).**

▶ **Make sure users receive the information.** If you discover a problem after the product has been shipped to retailers, tell users by direct mail or e-mail, if possible, or newspaper and online advertising if not. Automobile-recall notices are one example of how manufacturers contact their users.

THE ROLE OF CORPORATE CULTURE IN ETHICAL AND LEGAL CONDUCT

Most employees work within organizations, such as corporations and government agencies. We know that organizations exert a powerful influence on their employees' actions. According to a study by the Ethics Resource Center of more than 2,000 employees in various businesses (2010), organizations with strong ethical cultures—organizations in which ethical values are promoted at all levels and employees see that everyone lives up to the organization's stated values—experience fewer ethical problems. Compared with organizations with weak ethical cultures, in organizations with strong ethical cultures, far fewer employees feel pressure to commit misconduct, far fewer employees observe misconduct, far more employees report the misconduct that they see, and there is far less retaliation against employees who report the misconduct.

Companies can take specific steps to improve their ethical culture:

• The organization's leaders can set the right tone by living up to their commitment to ethical conduct.

• Supervisors can set good examples and encourage ethical conduct.

• Peers can support those employees who act ethically.

• The organization can use informal communication to reinforce the formal policies, such as those presented in a company code of conduct.

In other words, it is not enough for an organization to issue a statement that ethical and legal behavior is important. The organization has to create a culture that values and rewards ethical and legal behavior. That culture starts at the top and extends to all employees, and it permeates the day-to-day operations of the organization.

One company that has earned praise for its commitment to ethical and legal conduct is Texas Instruments (TI). Its culture is communicated on its Web site, which contains a comprehensive set of materials that describes how TI employees and suppliers are required to act, and why (Texas Instruments, 2010). The materials begin with a statement from the President and Chief Executive Officer, Rich Templeton:

> Notice that this statement outlines the company's core values—respect for people and the environment, trust in business relationships—and links those values to the business success that the company enjoys. Many companies today have a statement of values, focusing on issues of character (such as respect, trust, honesty, and commitment).

TI's products and markets have changed through the years, but our determination to maintain the values on which our company was founded remains true to this day. High ethical standards, a respect for individuals, a commitment to long-term relationships, a concern for the environment, and a sense of duty to our communities—these are the principles that bind us together and make TI a company of which we can all be proud.

Innovation lies at the center of all we do, but great products, alone, aren't enough to win in the long run. In our business, trust matters, and a reputation for integrity is our most effective marketing tool. Our customers choose TI, not only for our technology, but also because we treat them with respect, deal with them fairly, and deliver on our promises. We strive to be a company they can count on, and that focus has played a huge role in our success.

Throughout our company history, TI's commitment to high ethical standards has served our people, our customers and our communities. But it has also been good for business. Our determination to do the right thing demands that we look at problems from many perspectives and consider the full impact of our actions. As a result, we develop solutions that are more efficient, more creative, and more effective.

The TI site also includes a number of other statements:

- The "Values and Ethics Statement" concludes, "Know what's right. Value what's right. Do what's right."
- The "Integrity Statement" focuses on respect, dignity, courtesy, inoffensive behavior, a respect for privacy and cultural differences, and the employee's right to ask tough questions about ethics.
- The "Innovation Statement" focuses on the benefits of collaboration, nondiscrimination, diversity, open communication, recognition for achievement, and a professional workplace.
- The "Commitment Statement" focuses on lifelong learning, accountability, integrity, and customer satisfaction.

In addition, the site includes numerous other ethics resources, including the company's formal code of conduct for all employees, its code of ethics for company officers, information about the company's Ethics Office, links to all

its ethics publications, its statement of ethics for its suppliers, and detailed information on how to contact the TI Ethics Office confidentially.

Does the culture improve conduct? That question is difficult to answer, but the TI site describes some of the major awards the company has won for its ethics program, presents data from its own employee surveys showing they think the company's ethical culture is good, and describes the company's outreach to communities and other organizations that have established their own ethics programs.

One important element of a culture of ethical and legal conduct is a formal code of conduct. Of the 200 largest corporations in the world, more than half have codes of conduct (Kaptein, 2004). In the United States, most large corporations have them, as do almost all professional societies. Codes of conduct vary greatly from organization to organization, but most of them address such issues as the following:

- adhering to local laws and regulations, including those intended to protect the environment
- avoiding discrimination
- maintaining a safe and healthy workplace
- respecting privacy
- avoiding conflicts of interest
- protecting the company's intellectual property
- avoiding bribery and kickbacks in working with suppliers and customers

A code of conduct focuses on behavior, including such topics as adhering to the law.

Many codes of conduct are only a few paragraphs long; others are lengthy and detailed, some consisting of several volumes.

An effective code has three major characteristics:

- *It protects the public rather than members of the organization or profession*. For instance, the code should condemn unsafe building practices but not advertising, which increases competition and thus lowers prices.
- *It is specific and comprehensive*. A code is ineffective if it merely states that people must not steal, or if it does not address typical ethical offenses such as bribery in companies that do business in other countries.
- *It is enforceable*. A code is ineffective if it does not stipulate penalties, including dismissal from the company or expulsion from the profession.

▶ **On TechComm Web**

For links to codes of conduct from around the world, see Codes of Conduct/Practice/Ethics from Around the World. Click on Links Library for Ch. 2 on **<bedfordstmartins.com/techcomm>**.

Although many codes are too vague to be useful in determining whether a person has violated one of their principles, writing and implementing a code can be valuable because it forces an organization to clarify its own values and can foster an increased awareness of ethical issues. Texas Instruments, like many organizations, encourages employees to report ethical problems to a committee or a person—sometimes called an *ethics officer* or an *ombudsperson*—who investigates and reaches an impartial decision.

INTERACTIVE SAMPLE DOCUMENT
Linking Values and Conduct

The following statement of values, published by Verizon, introduces the company's 31-page code of conduct. The questions in the margin ask you to think about how a statement of values provides a basis for an organization's code of conduct (as discussed on page 31).

1. Where does this statement explain the reason Verizon exists? Is the explanation clear?

2. The "Performance Excellence" section is different from the other three sections in that it deals less with an aspect of character than with the business objectives of the company. How would you revise this section so that it is better integrated with the statement of values?

3. This statement of values uses idealistic statements (we never let the customer down) rather than more-realistic statements (we try never to let the customer down). Which sort of statement is more effective?

▶ **On TechComm Web**

To submit your responses to your instructor, click on Interactive Sample Documents for Ch. 2 on <bedfordstmartins .com/techcomm>.

VERIZON COMMITMENT AND VALUES

The Verizon commitment is to put our customers first by providing excellent service and great communications experiences. This is what we do and this is why we exist. By focusing on our customers and being responsible members of our communities, we will produce a solid return for our shareowners, create meaningful work for ourselves and provide something of lasting value for society. As a result, Verizon will be recognized as a great company.

In order to keep this commitment, we need to always honor our core values:

Integrity

Integrity is at the heart of everything we do. We are honest, ethical and upfront because trust is at the foundation of our relationships with our customers, our communities, our stakeholders and each other.

Respect

We know it is critical that we respect everyone at every level of our business. We champion diversity, embrace individuality and listen carefully when others speak.

Performance Excellence

We hold ourselves to a very high standard of performance. We prize innovative ideas and the teamwork it takes to make them realities. We never stop asking ourselves how we can make the customer experience better, and every day we find an answer.

Accountability

We take responsibility for our actions as individuals, as team members, and as an organization. We work together, support one another and never let the customer—or our coworkers—down.

Great companies are judged by what they do, not by what they say. To be the best, we're going to keep pushing ourselves in new and exciting directions. These values will guide our every action.

Source: Verizon, 2010 <https://www22.verizon.com/about/careers/pdfs/CodeOfConduct.pdf>.

If you think there is a serious ethical problem in your organization, find out what resources your organization offers to deal with it. If there are no resources, work with your supervisor to solve the problem.

What do you do if you have exhausted all the resources at your organization and, if appropriate, the professional organization in your field? The next step will likely involve *whistle-blowing*—the practice of going public with information about serious unethical conduct within an organization. For example, an engineer is blowing the whistle when she tells a regulatory agency or a newspaper that quality-control tests on a company product were faked.

Ethicists such as Velasquez (2006) argue that whistle-blowing is justified if you have tried to resolve the problem through internal channels, if you have strong evidence that the problem is hurting or will hurt other parties, and if the whistle-blowing is reasonably certain to prevent or stop the wrongdoing. But Velasquez also points out that whistle-blowing is likely to hurt the employee, his or her family, and other parties. Whistle-blowers can be penalized through negative performance appraisals, transfers to undesirable locations, or isolation within the company.

COMMUNICATING ETHICALLY ACROSS CULTURES

Every year, the United States exports more than $1.8 trillion worth of goods and services to the rest of the world (U.S. Census Bureau, 2010, p. 1264). U.S. companies do not necessarily have the same ethical and legal obligations when they export as when they sell in the United States. For this reason, communicators should understand the basics of two aspects of writing for people in other countries: communicating with cultures with different ethical beliefs and communicating with countries with different laws.

Communicating with Cultures with Different Ethical Beliefs

Companies face special challenges when they market their products and services to people in other countries (and to people in their home countries who come from other cultures). Companies need to decide how to deal with situations in which the target culture's ethical beliefs clash with those of their own culture. For instance, in many countries, sexual discrimination makes it difficult for women to assume responsible positions in the workplace. If a U.S. company that sells computers, for example, wishes to present product information in such a country, should it reinforce this discrimination by excluding women from photographs of its products? Ethicist Thomas Donaldson argues that doing so is wrong (1991). Under the principle he calls the *moral minimum*, companies are ethically obligated not to reinforce patterns of discrimination in product information.

However, Donaldson argues, companies are not obligated to challenge the prevailing prejudice directly. A company is not obligated to include photographs that show women performing roles they do not normally perform within that culture, nor is it obligated to portray women wearing clothing, makeup, or jewelry that is likely to offend local standards. But there is nothing to prevent an organization from adopting a more activist stance. Organizations that actively oppose discrimination are acting admirably.

Communicating with Cultures with Different Laws

When U.S. companies export goods and services to other countries, they need to adhere to those countries' federal and regional laws. For instance, a company that wishes to export to Montreal must abide by the laws of Quebec Province and of Canada. A company that wishes to export to Germany must abide by the laws of Germany and of the European Union, of which it is a part. In many cases, the target region will not allow the importation of goods and services that do not meet local laws. The hazardous-product laws of the European Union, in particular, are typically more stringent than those of the United States.

Because exporting goods to countries with different laws is such a complex topic, companies that export devote considerable resources to finding out what they need to do, not only in designing and manufacturing products but also in writing the product information. For a good introduction to this topic, see Lipus (2006).

PRINCIPLES FOR ETHICAL COMMUNICATION

Although it is impossible to state principles for ethical communication that will guide you through all the challenges you will face communicating in the workplace, the following ten principles provide a starting point.

Abide by Relevant Laws

You must adhere to the laws governing intellectual property. Here are some examples:

- *Do not violate copyright*. When you want to publish someone else's copyrighted material, such as graphics you find on the Web, get written permission from the copyright owner.
- *Honor the laws regarding trademarks*. For instance, use the trademark symbol (™) and the registered trademark symbol (®) properly.
- *Live up to the express and implied warranties on your company's products*.
- *Abide by all laws governing product liability*. Helyar's (1992) guidelines, presented in this chapter on page 28, are a good introduction for products to be sold in the United States. Lipus's (2006) guidelines are useful for products to be sold outside the United States.

Abide by the Appropriate Professional Code of Conduct

Your field's professional organization, such as the American Society of Civil Engineers, is likely to have a code that goes beyond legal issues to express ethical principles, such as telling the truth, reporting information accurately, respecting the privacy of others, and avoiding conflicts of interest.

Abide by Your Organization's Policy on Social Media

Most organizations have written policies about how employees may use social media. These policies address such issues as what kinds of Web sites employees may visit while at work, how employees should represent themselves and the organization both at work and outside of work, and whether employees may set up a blog on the organization's servers. You should study your organization's policies related to social media. If you think that you will be unable to abide by those policies, you should not work there, or you should abide by them while you try to change them.

Take Advantage of Your Employer's Ethics Resources

Your employer is likely to have a code of conduct, as well as other resources, such as an ethics office or ombudsperson, that can help you find information to guide you in resolving ethical challenges you encounter. Your employer will likely have a mechanism for registering complaints about unethical conduct anonymously.

Tell the Truth

Sometimes, employees are asked to lie about their companies' products or about those of their competitors. Obviously, lying is unethical. Your responsibility is to resist this pressure, going over your supervisor's head if necessary.

Don't Mislead Your Readers

A misleading statement—one that invites or even encourages the reader to reach a false conclusion—is ethically no better than lying. Avoid these four common kinds of misleading technical communication:

> **In This Book**
>
> For a more detailed discussion of misleading writing, see Ch. 10. For a discussion of avoiding misleading graphics, see Ch. 12.

- *False implications*. If you work for SuperBright and write, "Use only Super-Bright batteries in your new flashlight," you imply that only that brand will work. If that is untrue, the statement is misleading. Communicators sometimes use clichés such as *user-friendly*, *ergonomic*, and *state-of-the-art* to make the product sound better than it is. Use specific, accurate information to back up your claims about a product.

- *Exaggerations*. If you say, "Our new Operating System 2500 makes system crashes a thing of the past," but the product only makes them less likely, you are exaggerating. Provide the specific technical information on the

reduction of crashes. Do not write, "We carried out extensive market research," if all you did was make a few phone calls.

- *Legalistic constructions.* It is unethical to write, "The 3000X was designed to operate in extreme temperatures, from −40 degrees to 120 degrees Fahrenheit," if the product cannot operate reliably in those temperatures. Although the statement might technically be accurate—the product was *designed* to operate in those temperatures—it is misleading.

- *Euphemisms.* If you refer to someone's being fired, say *fired* or *released*, not *granted permanent leave* or *offered an alternative career opportunity*.

Use Design to Highlight Important Ethical and Legal Information

Courts have found that information that is buried in footnotes or printed in very small type violates the company's obligation to inform consumers and warn them about hazards in using a product. If you want to communicate safety information or other facts that readers need to know, use design features to make it easy to see and understand. Figure 2.4 shows how design principles can be used to communicate nutritional information in food labels.

Figure 2.4   Using Design to Emphasize Important Information
This nutritional labeling system is called "traffic light labeling" because it uses red and green to indicate how healthy a food is.
Source: Alamy, 2011 <www.alamy.com>.

Be Clear

Clear writing helps your readers understand your message easily. Your responsibility is to write as clearly as you can to help your audience understand what you are saying. For instance, if you are writing a product warranty, make it as simple and straightforward as possible. Don't hide behind big words and complicated sentences. Use tables of contents, indexes, and other accessing devices to help your readers find what they need.

Avoid Discriminatory Language

Don't use language that discriminates against people because of their sex, religion, ethnicity, race, sexual orientation, or physical or mental abilities. Employees have been disciplined or fired for sending inappropriate jokes through the company e-mail system.

Acknowledge Assistance from Others

Don't suggest that you did all the work yourself if you didn't. Cite your sources and your collaborators accurately and graciously. For more about citing sources, see Chapter 6, page 125, and Appendix, Part B, page 667.
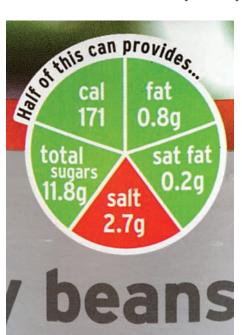
Writer's Checklist

- [ ] Did you abide by relevant laws? (p. 34)
- [ ] Did you abide by the appropriate corporate or professional code of conduct? (p. 35)
- [ ] Did you abide by your organization's policy on social media? (p. 35)
- [ ] Did you take advantage of your company's ethics resources? (p. 35)
- [ ] Did you tell the truth? (p. 35)

Did you avoid using
  - [ ] false implications? (p. 35)
  - [ ] exaggerations? (p. 35)
  - [ ] legalistic constructions? (p. 36)
  - [ ] euphemisms? (p. 36)

- [ ] Did you use design to highlight important ethical and legal information? (p. 36)
- [ ] Did you write clearly? (p. 36)
- [ ] Did you avoid discriminatory language? (p. 36)
- [ ] Did you acknowledge any assistance you received from others? (p. 37)

Exercises

1. It is late April, and you need a summer job. In a local newspaper, you see an ad for a potential job. The only problem is that the ad specifically mentions that it is "a continuing, full-time position." You know that you will be returning to college in the fall. Is it ethical for you to apply for the job without mentioning this fact? Why or why not? If you feel it is unethical to withhold the information that you plan to return to college in the fall, is there any way you can ethically apply? Be prepared to share your ideas with the class.

2. You serve on the Advisory Committee of your college's bookstore, which is a private business that leases space on campus and donates 10 percent of its profits to student scholarships. The head of the bookstore wishes to stock Simple Study Guides, a popular series of plot summaries and character analyses of classic literary works. In similar bookstores, the sale of Simple Study Guides yields annual profits of over $10,000. Six academic departments have signed a statement condemning the idea. Should you support the bookstore head or the academic departments? Be prepared to discuss your answer with the class.

3. **INTERNET EXERCISE** Find an article or advertisement in a newspaper or magazine or on the Web that you feel contains untrue or misleading information. Write a memo to your instructor describing the ad and analyzing the unethical techniques. How might the information have been presented more honestly? Include a photocopy or a printout of the ad with your memo.

4. **GROUP EXERCISE** Form small groups. Study the Web site of a company or other organization that has a prominent role in your community or your academic field. Find the information about the organization's commitment to ethical and legal conduct. Often, organizations present this information in sections called "information for investors," "about the company," "values and principles of conduct," or similar titles.

   - One group member could identify the section that states the organization's values. How effective is this section in presenting information that goes beyond general statements that ethical behavior is important?

   - A second group member could identify the section that describes the organization's code of conduct. Does the organization seem to take ethical and legal behavior seriously? Can you get a clear idea from the description whether the organization has a specific, well-defined set of policies, procedures, and resources available for employees who wish to discuss ethical and legal issues?

- A third group member could identify any information related to the organization's commitment to the environment. What does the organization do, in its normal operations, to limit its carbon footprint or in other ways encourage responsible use

of natural resources and limit damage to the environment?

- As a team, write a memo to your instructor presenting your findings. Attach the organization's code to your memo.

Case 2: The Ethics of Requiring That Students Subsidize a Plagiarism-Detection Service

Background

You are the chair of your university's nine-member Student Council. The purpose of the Student Council is to give students a voice in university governance. The university's administration often presents to the Student Council its ideas on ways to improve the academic and social lives of students. The Student Council then discusses these ideas and sometimes solicits the views of the entire student body before responding to the administration.

The subject of this month's meeting is a letter from the Provost, Mary Lingram, to you as the chair of the Student Council. In the letter, Provost Lingram discusses an idea to reduce plagiarism by purchasing a site license to Turnitin.com, a plagiarism-detection service (see Document 2.1).

You distribute copies of the letter to the other members of the Student Council, and you can see that they don't look happy. After a minute, you say, "What do you think?"

Crystal Noack responds first. "Well, speaking as someone who's over twenty thousand dollars in debt," she says, pausing for effect, "I'm not wild about paying a for-profit company to check up on whether I'm plagiarizing."

"Yeah," agrees Adam Levanger, "I don't plagiarize. How is it fair that I have to pay?"

"How do we even know how big a problem plagiarism is in the first place?" Laura Kim asks. "The Provost didn't say anything about how pervasive it is here."

Sa'id Hamdi says, "What about my rights as a student? I don't get a say in whether my paper gets uploaded to Turnitin? Isn't there an intellectual-property issue here?"

"Okay, it seems that this is kind of complicated," you say. "How about we do this: Let's take a look at the site and see if we can understand how it works. By Monday I'll write a post to our discussion list, soliciting your arguments. I think the best strategy is to look at the ethics of how this would affect us, not the cost—"

"That's right," Adam interrupts. "Six bucks a year is three coffees."

"Okay," you continue. "If we don't like it, it has to be because it violates our rights, or something like that. So let's come at this from the ethics angle. But we need to think about what the Provost said about how it's in everyone's best interest if people realize we're not all a bunch of cheaters. If you all post to the list by the end of the week, I'll post a draft of a letter to the Provost by Monday. Then we'll take it from there."

Your Assignment

1. Write a draft of a letter to Provost Lingram that presents the Student Council's analysis of whether it is right for the university administration to require that all students subsidize a site license for Turnitin.com. Start by reviewing the company's Web site to better understand the service the company provides. Then analyze the ethical implications of the Provost's idea by considering it from the perspective of the four ethical standards (rights, justice, utility, and care). Do all of the standards pertain? Which standards enable you to make the persuasive case for your recommended course of action? Present your findings in a letter to Provost Lingram.

As you know, the chief responsibility of all educators at the university is to ensure that students receive the best education possible. Although a university education consists of many experiences that occur outside the classroom, the core element is to help students learn how to think critically, creatively, and responsibly about the world and their role in it. To this end, the ability to write clearly and originally is fundamentally important.

I write to you today to solicit the Student Council's views on an idea we are considering to confront an insidious threat to the success of our shared mission: plagiarism. Plagiarism—the use of another's words and ideas without proper attribution—has long been a threat to the integrity of writing by students and professionals alike. In the age of the Internet, however, with easy access to term-paper mills, plagiarism has become an epidemic on campuses all across the country.

At the suggestion of a number of department chairs representing all four of our academic colleges, I am investigating purchasing a site license to Turnitin.com, the leading plagiarism-detection service. With a site license, any instructor in any department on campus can upload some or all papers to Turnitin and quickly receive a report indicating whether the papers are original or contain plagiarized writing.

In these times of economic austerity, the university cannot afford to purchase this site license out of the existing operating budget. Therefore, we are considering proposing a $3 increase in the student fee paid each semester by full-time students and a $2 increase for part-time students.

The administration feels that Turnitin can be a highly effective tool in reducing the incidence of plagiarism on campus, thus helping us educate our students in the norms of academic conduct. In addition, reducing plagiarism will have the effect of protecting the students' investment in their education by ensuring that we maintain our well-earned reputation with graduate schools and employers for educating honest, skilled, and thoughtful leaders of tomorrow.

Would you please let me know the Student Council's views on this idea before the end of the month?

Sincerely,

Mary Lingram, Provost

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